## PURAFIL ENVIRONMENTAL CORROSIVITY REPORT

11-Jun-2010

**Company:** 111065

Room Area ID: Reference #:



 Sales Order #:
 C002697

 CCC Panel #:
 P67984

 Date In:
 21-May-2010

 Date Out:
 03-Jun-2010

Days In Service: 13

**CCC Panel # P67984** 

ISA Class G2
Moderate

Copper Corrosion 835 Å/30 Days

Silver Corrosion 249 Å/30 Days

(see next page for complete analysis)

## Summary for PURAFIL CCC # P67984

The electrolytic reduction analysis on Corrosion Classification Coupon #P67984 shows the presence of moderate concentrations of contaminants and high/variable humidity in the environment tested. The hydrogen sulfide level is expected to range between 3 and 10 ppb, sulfur dioxide between 10 and 100 ppb, and chlorine between 1 and 2 ppb. The presence of moisture and small amounts of inorganic chlorine compounds greatly accelerates sulfide corrosion. The effects of corrosion are measurable and may be a factor in determining equipment reliability.

Your local representative for additional information and assistance is:

Environmental Health and Eng

117 Fourth Avenue, Needham MA 02494, USA

tminegishi@eheinc.com

Purafil, Inc. / 2654 Weaver Way, Doraville GA 30340 USA / (770) 662-8545 / (770) 263-6922 Email: purafil@purafil.com / Internet: http://www.purafil.com

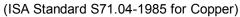
Displaying Page 1 Display Page 2

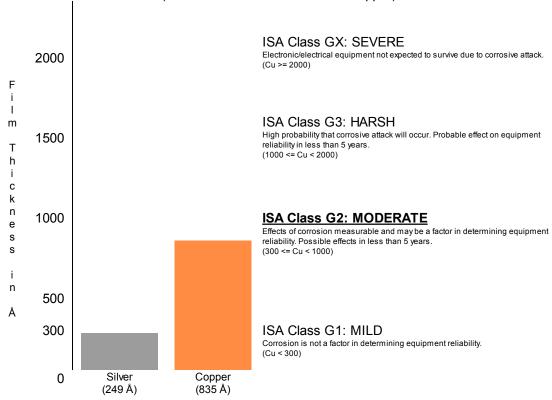
1 of 1 6/15/2010 4:17 PM

## PURAFIL CCC # P67984 Analysis Results

Corrosion Film Composition				Gold Coupon -
	30 Days	Projections <u>1 Year</u>	<u>5 Year</u>	Magnified 20x
Copper Films Cu <sub>2</sub> S	416 Å	1450 Å	3243 Å	
Cu <sub>2</sub> O	155 Å	541 Å	1209 Å	
Unknowns	264 Å	919 Å	2056 Å	
Totals	835 Å	2910 Å	6508 Å	
Silver Films				
AgCI	67 Å	815 Å	4076 Å	
Ag <sub>2</sub> S	108 Å	1314 Å	6570 Å	
Unknowns	74 Å	905 Å	4524 Å	
Totals	249 Å	3034 Å	15170 Å	
Gold Pore Corrosion: Note: 1000 Å = 0.1 micron				

## **Equipment Reliability Correlation**





Displaying Page 2 <u>Display Page 1</u>

1 of 1 6/15/2010 4:17 PM